

CASE STUDY ANALYSIS: ENGLISH-GERMAN BILINGUAL EARLY CHILDHOOD

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ABSTRACT

It is a common belief that young children have an innate ability to learn a second language and can learn a second language naturally, just as they learn their first. How true is this? What factors contribute to full bilingualism in a young child? Through the case study analysis of a native English speaker learning German from the language onset period (1.5 years old), this paper will explore the validity of the assumption that young children learn language effortlessly as well as other confounding factors that impact the second language acquisition process.

INTRODUCTION

The purpose of this study is to use an individual case study to examine the factors that may encourage or inhibit Second language acquisition in a young child.

Factor 1: Critical Period or, more likely, Sensitive Period

The analysis will examine the impact of the Critical Period Hypothesis, Lennenberg (1967) on German as a Second Language in a native English speaker from ages 1.5 years of age until 5 years of age. Lennenberg proposed second language acquisition during the critical period as an unconscious event. Although his theory has been disputed by many, the general consensus is that full bilingualism is most easily attained by those who start early. Especially in regards to accuracy of pronunciation and intonation. Bialystok (1997) proposes a more realistic "sensitive period" for language acquisition which this paper will explore further.

Factor 2: Contextual -Learning Environment

This section will explore the impact of the learning environment on the subject's Second Language Development. The analysis will explore how an immersive and play based, informal, mixed age environment may support Second Language development, especially during the 'sensitive period.' Children in this phase of development, learn almost everything in a naturalistic rather than formal way. The examination of this case study will address the role of play, choice and voice in an immersion environment on the SLA of the subject.

Factor 3: Personal identity and agency

The impact of the child's identity and necessity to master the target language. What are the motivational factors (both integrative and instrumental) that influenced the subject's SLA and how did motivation change over time? How did the subject's personality influence SLA and in turn, has his personality been influenced by the acquisition of a second language, and with it, the language's cultural norms?

LITERATURE REVIEW

Second Language Acquisition in Young Children:

Lennenberg, (1967) argued that there is a "critical period" in early childhood when full bilingualism and native level SLA is possible. His theory has been disputed for several reasons. Firstly, the theory is largely based on feral children who grew up in severely deprived environments and were not able to fully acquire language after missing the "critical window." These subjects suffered from many confounding factors which would negatively impact all sorts of development and they sadly, missed the opportunity to acquire a first language at a developmentally appropriate time, not a second. Clearly, the sample size was also much too

small to be significant. Secondly, observation of language acquisition offers many examples of bilinguals who have attained a second language to a near native level into adulthood.

However, while Lennenberg's hypothesis may be overreaching and overly rigid, there is a widely held consensus that the earlier a second language is introduced, the the better. Especially given the right circumstances, namely the quality and quantity of exposure to the target language. "The impact of the critical period hypothesis depends largely on the learning situation, notably the extent to which initial exposure is substantial and sustained" (Lightbown 2000, p. 432).

Alternatives to Lennenberg's hypothesis have been proposed to address its shortcomings. Selinger (1978) claimed that there is a possibility of multiple critical periods. While other researchers concur that the ability to reach native like attainment of a second language merely declines over time.

There seems to be a general consensus that young children generally have a better ability to attain native like fluency in a second language. The question is, why? Perhaps part of the answer is that they have a higher level of plasticity in terms of language learning: an increased capability for imitation, increased flexibility, spontaneity and tolerance for new experiences. Bialystok (1997), proposes a 'sensitive period' for SLA during which "children prefer accommodation (creating new concepts) over assimilation (extending existing concepts). Bialystok suggests that children's preference for accommodation "may be because children are in the process of creating new categories all the time as they are learning new information" (Bialystok, 1997, p. 132). Studies conducted of children learning a second language in naturalistic learning settings provide the evidence that supports this assumption. Children do not respond to language as a form, they are not concerned by its rules, for them it is a tool to communicate and connect. The reason that young children have an ability to access a second language in a more natural way is their lack of concern for such rules.

"[A]dults have to work through an established first-language system, studying explicit grammar rules and practicing rote drills, the young kids learn naturally, absorbing the sounds, structures, intonation patterns and rules of a foreign language intuitively, as they did their mother tongue. The young brain is inherently flexible, uniquely hard-wired to acquire language naturally." (Ghasemi, B., & Hashemi, M, 2011, p. 875)

The Learning Environment:

The interaction of Nature and Nurture is inextricable in language learning. "This point is best understood as an interaction between biological and environmental factors. Our brains may be more receptive to language earlier in life. But importantly, our environment is also more conducive to language learning earlier in life." (Byers-Heinlein, K., & Lew-Williams, C., 2013, p. 4)

Young children learn best in naturalistic settings. In turn, a healthy language environment teaches language in a way that is ideally suited to a child's development.

"Caregivers typically speak in ways that are neither too simple nor too complex, and children receive hours and hours of practice with language every day. This high-quality and high-quantity experience with language—a special feature of how people communicate with young children—often results in successful language learning. It gives children rich, diverse, and engaging opportunities to learn about the sounds, syllables, words, phrases, and sentences that comprise their native language. But beyond the first years of life, second language learning often happens very differently." (Byers-Heinlein, K., & Lew-Williams, C., 2009, p. 7)

The work of a young child is play. This is how they learn how to interact with the world around them, discover things (and) become acquainted with rules and social norms. Play is also how they learn language. Preschool language learners lack literacy skills. They "learn the language mostly in an incidental fashion. Essentially, this involves processing the meaning of language in order to understand it along with complete disregard for language form." (Guz, E., 2016, p. 47). Additionally, young children's knowledge of the world and their awareness of the learning process is limited and their need to move quite great" (Guz, E., 2016, p. 47). These factors make play-based learning and a natural, family like setting ideal for early childhood SLA.

Personal identity, agency, personality, and Self-Esteem:

Although it is understood that young children possess a natural ability to learn a second language, if given the right environment. Not all children learn a language in the same time frame or with the same success given the same environmental circumstances. Personal Agency, moderated by several factors such as personality, motivation and self esteem are all factors which impact the journey to SLA.

“Agency refers to people’s ability to make choices, take control, self-regulate, and thereby pursue their goals as individuals leading, potentially, to personal or social transformation...A sense of agency enables people to imagine, take up, and perform new roles or identities” (Duff, P. A., 2012, p 417).

Learners must have reason to make the risk and effort to learn a second language “representing solidarity with a peer group, and that it is not simply a result of exposure: it could be described as a decision as to who the learner wants to identify with” (Duff, P. A., 2012, p. 417). When a learner has a healthy sense of agency, he or she may find motivation to invest in the target language. Motivation can be divided into two types: Integrative motivation and Instrumental motivation. When a learner displays integrative motivation, he has an interest in the people who speak the target language and wants to be able to communicate with them. When a learner displays instrumental motivation, his goals are functional. He wants to get a job, pass a test or function in the target language Khasinah, S. (2014). A young child in an immersive Second Language environment may experience both types of motivation, but the longer and more successful the immersion, the more Integrative motivation would come into play as the child forms close relationships with peers who speak the target language. “Gardner (1979) links an integrative motivation to 'additive bilingualism,' which means that learners add a second language to their skills with no harm to their mother tongue.” (Khasinah, S., 2014, p. 258) Motivation to learn a second language is in turn tied to identity and agency. Identity has traditionally been understood as “One’s connection or identification with a particular social group, the emotional ties one has with that group, and the meanings that connection has for an individual.” Tajfel (1974) While an updated understanding accounts for multiple and shifting identities: “a dynamic and shifting nexus of multiple subject positions.” Norton (2000). Motivation as connected to identity, is dynamic, emergent, and socially constructed. Children especially are developing their identities. There are many factors that may impact how child in an immersive language environment begins to identify with speakers of the target language. This shifting sense of identity will impact the child’s motivation to learn.

Personality also plays a key role in SLA. Lightbown, P. M., & Spada, N. (2002) report that the most important personality factors in connection to SLA are: introversion/extroversion, self-esteem, inhibition, risk-taking, anxiety and empathy. Although some facets of personality are fairly stable, many may change based on the situation or environment. Young children who given autonomy and the opportunity to practice skills that allow them to be successful in their daily lives tend to exhibit higher levels of self esteem and lower levels of inhibition.

A small child has little choice over their environment and daily routines, however they are people in their own right and are continually making decisions to assert their autonomy and assert their personal preferences. “Although children... may have relatively little apparent choice or control over their L2 learning, reaching advanced levels of L2 proficiency arguably requires concerted effort, sustained and strategic practice, and opportunity – all manifestations of personal and social agency” (Duff, P. A., 2012, p. 417).

CASE STUDY

Atticus has recently had his fifth birthday. He was born in Germany; his father and mother (the author and researcher) are both native English speakers.

Between 2016 and 2017, when Atticus was 1.5 years-2.5 years old, he spent 40-45 hours a week in a fully immersive German speaking home day care environment. His carers and the other children spoke only German. When he started daycare, he was capable of understanding and following directions in his mother tongue, and he was beginning to speak. By the time he was 2, he was speaking in 3-5 word sentences in English. His carers were also excited that he was using some basic German words and following instructions in German. During this time period, he experienced a language explosion in his mother tongue, while his German remained mostly passive. He did not use any code mixing and he did not use any German at home.

From 2017-2020, aged 2.5 until the present, Atticus has been in a mixed age group German Kindergarten for 40-45 hours per week. He has one bilingual teacher (English/ German), who initially (for about one year) spoke to him in English as needed.

For his first two years of Kindergarten, he also had a close English Speaking friend in his group. All group instruction at the kindergarten is in German.

Although Atticus had already had a year's exposure to the German language and was competently expressing himself in his mother tongue by the time he started attending kindergarten, he remained in the "Silent Period" of SLA for a long time. He was never pressured to speak German and he was never taught in a formal way. His Kindergarten is play based and values the development of social and decision making skills.

It took over two years for Atticus to feel comfortable expressing himself in German. A big shift happened when his English speaking friend graduated from the Kindergarten, and Atticus was left alone, as the only English speaker in the group. The first month without his friend, he missed him terribly. Since then, he has become much closer with German speaking children and developed many new friendships. The year his English speaking friend graduated, he began to be invited by German speaking classmates to activities outside the kindergarten.

At 5 years old, Atticus is solidly in stage 3 of language acquisition: Becoming confident as a user of German, he is entering Stage 4: competency as a German user- cultural understanding, jokes, idioms and metaphors, but his age prevents him from fully appreciating such complex linguistic ideas (Clarke 1996, Hester 1989). His teachers are very pleased with his language development and believe that he is right on track.

DISCUSSION AND ANALYSIS

During the "sensitive period" Bailystock, E. (1997), young learners are often able to produce more accurate pronunciation and intonations and often exhibit and increased capability for imitation. However, the reasons behind these observable differences between younger and older language learners cannot be known. "Often, the system cannot be measured directly and must be inferred," (Bialystok, E. 1997, p. 174).

Although Atticus is a sequential second language learner and the amount and quality of language exposure, vastly outweighs my own, he clearly has a much better ability to pronounce German words accurately. He is often bothered by his father's and my own attempts at German pronunciation, and tries largely unsuccessfully, to teach us by example. Perhaps the answer to his native like pronunciation is in his method of conceptualising new phonemes. Bailystock, E. (1997) argues that there are two options for adapting structures in order to build a representation of a second language. One option is to extend existing categories to include a sound that are slightly different than the category of sounds in the first language. If the sound is just slightly different, it may be represented as another incident of the same category. As a strategy, extension, will likely result in a foreign accent. The other option is to create a new category. A sound that is slightly different from the one in the first language can be treated as a new category, it's difference is noted rather than an overgeneralisation of it's similarities. This representation will create an accurate representation of the sound. Children are constantly creating new categories as they assimilate new information. This learning orientation is not unique to young children, but developmentally more natural. "Typically learners continue developing new categories only until about 5 or 6 years of age" (Bialystok, E., 1997, p. 132). As a sequential bilingual learning German beginning at the age of 1.5 years Atticus is able to speak both languages with Native like fluency.

As he approaches the age of 5, his grammatical structures continue to improve in German and are beginning to approach the complexity of his English grammar. Interestingly Atticus uses one filler repeatedly in both English and German, especially as he is becoming more able and interested in expressing complex ideas about his knowledge in both languages; for example: the temperature of the sun, or the size of a Brontosaurus. To buy himself time to formulate his ideas, he frequently repeats the filler "and then, and then" or sometimes "und then." when speaking English and uses the same filler in German "und dann, und dann." Rieger, C. (2001), noted that English-German bilingual children tended to use an "idiosyncratic filler" in their non-dominant language (a filler that dominated over all other fillers) but varied fillers in their mother tongue. SLA Beginners tend to leave unfilled pauses, while native speakers use a variety of fillers (Rieger, C., 2001, p. 81). This is an interesting attribute in the subject's speech patterns, which may hint at parallel language development.

Atticus's opportunity to learn a language from a young age may help to lead to full bilingualism if exposure he is able to continue receiving quality exposure to the German language, "There may not be a sharp turn for the worse at any point in development, but there is an incremental decline in language learning abilities with age." (Byers-Heinlein, K., & Lew-Williams, C., 2013, p. 6).

The Learning Environment:

Length of exposure is essential to full SLA. "Both quality and quantity matter. High quality language exposure involves social interaction – infants do not readily learn language from television" (Byers-Heinlein, K., & Lew-Williams, C., 2013, p. 4).

Quantity:

Adults attempting to learn a second language may only be able to devote an hour or two a day to study, while children can be immersed in a rich second language environment for several hours each day. Atticus has experienced both quality and quantity in terms of his exposure to German. For over 3 years he has spent 5 days a week, 7 hours a day in an immersive German language environment. When he has had extended lapses in his exposure, his Second Language abilities have significantly regressed (most notably during extended summer vacations). Atticus spent two months in Canada after his first 10 months of German immersion. At the time (he was 2) he was just beginning to use single words or two word phrases and could follow instruction in German. After a 2 Month break in his exposure to German, Atticus stopped speaking in German entirely and did not respond to German when it was spoken to him. It took several months of continuous exposure to regain the language he had lost. Highlighting the importance of continued exposure to the target language.

Quality:

A language rich environment is the key to effective language acquisition. Atticus receives German language immersion in an informal setting from Native speakers. The kindergarten allows children to choose where and how they spend their time. They have the choice to move between rooms and often have the choice to be in an outdoor environment as well. In addition the groups are set up as "family groups," meaning that they are mixed age. The children are in the same mixed age group from when they enter the Kindergarten at age 1 or 2, until they graduate at age 6. The intention is that younger children will learn from older ones, and older children will practice responsibility and patience by helping the younger ones. The structure also provides stability and the ability to form long term relationships with both peers and carers. This environment provides a very naturalistic setting for the subject's SLA. Carers provide simple instructions to accommodate the youngest children, and Atticus has built his oral fluency alongside younger German speakers who are developing their Mother Tongue. There is very little formal literacy instruction until the children are 5-6 years old, when they begin to practice basic letter formation and phonemic awareness.

Children spend the majority of their day participating in free play. There is also a portion of the day where children play more structured games such as board games. Groups have a morning circle time to share experiences and sing songs. They eat breakfast and lunch as a group. Children help to serve and clean up the meals. They help themselves to snacks and water at specific times of the day. They brush their teeth after meals and undress/ dress themselves for naps. The goal is to develop social skills and self sufficiency. It is an ideal environment for a young child to be immersed in a second language. The structure of the day is built around short contextual bits of instruction and natural conversation. The language opportunities are rich and inviting, in addition to being lowing stress. Byers-Heinlein, K., & Lew-Williams, C., (2009) describe these conditions to be ideal for language learning.

Guz, E. (2016) highlights the value of play in language acquisition: "In play, the child chooses to perform and sustain an activity on his/her own and focuses on performing rather than completing it. The activity creates opportunities for active exploration which stimulates positive emotions (joy, satisfaction, pleasure, interest, pride)." (Guz, E., 2016, p. 46). A natural setting with plenty of positive, varied interactions and low stress reasons for interactions create an environment where SLA can thrive, and language learning becomes

unconscious and incidental. "In first and second language acquisition [the processes in play are referred to] to as incidental learning" (Guz, E., 2016, p. 42). Atticus's days at kindergarten revolve around play and give him plenty of opportunity for choice in how and what he plays.

Identity, Agency, and Self Esteem:

Despite sustained and quality exposure to German, Atticus remained resistant to speaking German for several years. He identified himself as an English speaker first and foremost and had little interest in fostering German friendships. Although he was born in Germany, his home environment has been isolated from German language and culture. Both his parents speak only English and have struggled to integrate into the German community. Family friends are English speakers. German is spoken only at a rudimentary level and when necessary in public, for example, at the grocery store. When Atticus joined his Kindergarten, he immediately gravitated towards the only other English speaker, a boy named Neil who was two years older than Atticus. For the next two years they played together at the kindergarten whenever they could, excluding other children. Their language of play was always English. Neil and Atticus both identified as outsiders and English speakers and did not have a powerful reason to integrate meaningfully with the German Speaking children. However, when Neil turned 6 and graduated from Kita, Atticus was left alone as the only English speaker in his group. He was sad for several months after Neil left the Kita. It took him time to find his friends amongst the German speakers. During those months, his identity began to shift. He started saying, "I speak English AND German." He began to be invited by German speaking classmates to activities outside the kindergarten. The first time he was nervous, saying "I don't speak German," but soon, his worries subsided. Duff, P. A., (2012) defines agency as "the ability to make choices about one's identity." Agency also enables us to take on new identities. Although Atticus was exposed to a German Peer group for several years, initially, he did not find a reason to identify with those peers. A change in circumstances was eventually the catalyst for a new identity to begin to form.

As Atticus's friendships with his German Speaking peers grew stronger and more meaningful to him, his motivation to speak German increased as well. Before he 'needed' to make German friends his motivation to speak German was largely instrumental. His teachers said he was often not tuned in to discussions. He would speak if he needed something, but chose not to play with German Speakers if he had the choice. By the time he became the only English speaker in his group, he had years of passive German input to draw from and his motivation to integrate with his peers became strong. At this point he went through an explosion in his German Language production

Personality:

It is probable that Atticus's personality may also have factored into his slow warming to speaking German. Atticus is someone in the middle of the introversion/ extroversion scale. He can be talkative, but he feels shy quite easily and does not enjoy talking with people he doesn't know well. He can also be very resistant to trying new things if he feels he may not be successful. He can be hard on himself and does not like to take risks if he thinks he will make a mistake. These facets of his personality may have inhibited his SL production until his confidence in his abilities grew. As noted by Lightbown, P. M., & Spada, N. (2002). Although these personality traits impact SLA, many personality traits change, based on the situation or environment. I believe that the stability and openness of Atticus's learning environment won him over in time. Although he started his SLA journey at a very young age, he demonstrated personal agency in his resistance to speaking and identifying with German for several years. Eventually, in this very safe and play based environment, his personal identity began to broaden, to include both languages and cultures, and his confidence grew. It wasn't until he chose to, that he became bilingual.

CONCLUSION

The impact of the "sensitive period" on the subject's SLA is not fully measurable, but is likely to have positively impacted native like fluency in his second language. It appears that the length, quantity and quality of exposure of an extended period of time were the most important factors for acquiring bilingualism. Although Atticus began immersion in his second language during his language explosion his mother tongue, he most definitely is a sequential bilingual. Even at a very young age, he required several years of continuous exposure to become fully bilingual.

The quality of Atticus's immersion was also a key to his SLA development. He learned his second language in a natural way, in a play based setting. Learning his second language, alongside younger children who

were learning German as their mother tongue, was one way in which the affective filter was lowered for Atticus. The kindergarten is a natural language learning environment.

Finally, Atticus's sense of personal agency and his personality came into play as he made the journey towards becoming bilingual. His personal choices and who he identified with, may have initially slowed or stalled his second language acquisition process, but over time the quality of his learning environment, his shifting identity and the sheer amount of exposure he received have allowed him to grow into a confident German speaker.

However, like many Third Culture kids, Atticus's entire life will soon change. His immersion in the German language will be coming to a close, as he will (hopefully) be moving to Mumbai in a few months. It will be interesting to see how much of his second language he will retain in the long run. It is difficult to know how to support a bilingual child, when the parents do not speak the same language as their own child. It will be interesting to see if Atticus can be supported to maintain his second language, with little chance to practice and despite the fact that he is not yet reading or writing in his Mother Tongue or German.

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